IOWA STATE JOURNAL OF RESEARCH / MAY, 1988 599-602
Vol. 62, No. 4

IOWA STATE JOURNAL OF RESEARCH
TABLE OF CONTENTS
Volume 62
(August, 1987—May, 1988)

No. 1, August, 1987

From the Editors 1

SCHUSTER, D. H. and L. SCHUSTER. Demographic data support a model for cultural change 3

HECK, P. W. and E. S. TAKLE. Objective forecasts of solar radiation and temperature 29

HAMMOND, E. G. Sylvester Graham: America's first food reformer 43

WESSEL, R. I. District heating decisions in Iowa—non-decision decision making 63

GUPTA, S. C. and K. J. FREY. Selection for vegetative growth rate of oats 75

KRAFSUR, E. S. and G. DAVIDSON. Production of semisterile mutants in the *Anopheles gambiae* s.l. species complex 85

YORK, S. L. Fitting human performance data: a comparison of three methods of data smoothing 99

DiGRINO, B. N., C. F. YOSHIOKA, L. D. COONEY, and B. C. WILHITE. Purpose and practice among clinical therapeutic recreation settings and community based recreation settings serving special populations. 109

Note 121

No. 2, November, 1987

From the Editors 123

ISELY, D. *Iowa State Journal of Research* (1926-1988) 127

BARNUM, S. R. and S. M. GENDEL. Heterotrophic growth of nine strains of filamentous cyanobacteria 147

BERAN, J. A. Daughters of the Middle Border, Iowa women in sport and physical activity 1850-1910 161

DEKKER, J., R. BURMESTER, K. C. CHI, and L. JENSEN. Mutant weeds of Iowa: S-triazine-resistant plastids in *Kochia scoparia* 183

FLOSI, J. W. and E. R. HART. Endocuticular growth rings as an indicator of age structure in *Belostoma flumineum* Say (Hemiptera:Belostomatidae) 189

HINZ, P. N. Nearest-neighbor analysis in practice 199

HIRA, T. K. and M. J. MUELLER. The application of a managerial system to money management practices 219

JUNGST, S. E. and K.-S. LEE. A ground cover inventory on land-capability classes V-VIII 235

LIN, S.-C. J. and W. D. WOLANSKY. Factors influencing attrition from teacher education programs 247

MBATA, K. J., E. R. HART, and R. E. LEWIS. Reproductive behavior in *Zelus renardii* Kolenati 1857 (Hemiptera:Reduviidae) 261

MIZE, C. W. and J. B. PAULISSEN. Yield equations and empirical yield tables for the oak-hickory type in Iowa 267

MULDER, P. G. and W. B. SHOWERS. Corn growth response to larval armyworm (Lepidoptera:Noctuidae) defoliation 279

OWEN, W. J. Initial analysis of a valid food animal disease database for Iowa 293

TAKEDA, K., K. J. FREY, and T. B. BAILEY. Relationships among traits in F_9-derived lines of oats 313

ZEFF, E. E. Women in the Iowa legislature: A 1986 update 329

ZIEHL, M. A. and W. F. HOLLANDER. Dun, a new plumage-color mutant at the I-locus in the fowl (*Gallus gallus*) 337

.....

No. 3, February, 1987

BURKE, K. From Page to Stage: The Use of Shakespeare's Sonnets in Introducing Intimidated Students to His Drama 347

COLEMAN, W. S. E. Anthony Boheme: A Forgotten Tragedian 359

EATON, S. The Rhetoric of (Dis)praise and Hamlet's Mother 377

KNIGHT, W. N. Shakespeare Before King James: Betrayal and Revelation 387

PRICE, J. E. "Because I Would Followe The Fashion": Rich's *Farewell to the Military Profession* and Shakespeare's *Twelfth Night* 397

RELIHAN, C. C. Appropriation of the "Thing of Blood": Absence of Self and The Struggle for Ownership in *Coriolanus* 407

RUTLEDGE, D. F. The Structural Parallel Between Rituals of Reversal, Jacobean Political Theory, and *Measure For Measure* 421

SHAFFER, B. W. "To Manage Private and Domestic Quarrels": Shakespeare's *Othello* and the Genre of Elizabethan Domestic Tragedy 443

YOUNG, B. W. Haste, Consent, and Age at Marriage: Some Implications of Social History for *Romeo and Juliet* 459

Afterword 475

. . . . . .

No. 4, May, 1988

From the Editors 477

HIBBERD, K. A. Selection for amino acid overproducer mutants in maize: Valine selections 479

HORSCH, R. B. and collaborators. *Agrobacterium*-mediated gene transfer to plants; engineering tolerance to glyphosate 487

MEREDITH, C. P., A. J. CONNER, and T. M. SCHETTINI. The use of cell selection to obtain novel plant genotypes resistant to mineral stresses 523

McCOY, T. J. Tissue culture selection for disease resistant plants 503

RANCH, J. and G. M. PACE. Science in the art of plant regeneration from cultured cells: An essay and a proposal for a conceptual framework 537

SMITH, R. H. and S. BHASKARAN. Sorghum cell culture: Somaclonal variation/screening 571

WIDHOLM, J. M. *In vitro* selection with plant cell and tissue culture: An overview 587